0089177

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0115-01 SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete Partial

300 Area 333 Bldg

DATA CHEM LABORATORIES

Cover Page

Report Identification Number: 06I-0115-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R300XX J451
Payroll#: 72520

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
10 Jan 2006	J10RM4	06I00788	NMAM 7300M	G060C006	G WIPE
10 Jan 2006	J10RM3	06I00789	NMAM 7300M	G060C006	G WIPE
10 Jan 2006	J10WT0	06I00790	NMAM 7300M	G060C006	G WIPE
10 Jan 2006	J10WR9	06I00791	NMAM 7300M	G060C006	G WIPE

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Name: Joanna C. Sanchez
Title: Chemist
Date: January 13, 2006

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

Case Narrative Page

Report Identification Number:	06I-0115-01
Subcontract Number:	0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist:	Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number:	DCHM
SAF#:	RC-001 / R300XX J451
Payroll#:	72520

General Set Information: There are 4 samples in set 06I-0115-01 which were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.07 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 2. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None were required.

Case Narrative Page

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: One sample in this batch was replicated. The RPD between the sample and the replicate was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples (µg/sample) = (A) x (B) x (C)

Where:
A = Analyte concentration from instrument determination (µg/L)
B = Concentration factor from sample preparation
= Final Volume of Digestate (L) / Sample
C = Dilution performed at time of analysis

Example Calculation: (1 µg/L) x (0.025 L/sample) x (1) = 0.025 µg/sample

Miscellaneous Comments: None

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

Report Page

Report Identification Number: 06I-0115-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R300XX J451
Payroll#: 72520

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J10RM4	06I00788	12 Jan 2006	<0.01	U	0.14		2.7	
J10RM3	06I00789	12 Jan 2006	<0.01	U	<0.07	U	<2.	U
J10WT0	06I00790	12 Jan 2006	<0.01	U	<0.07	U	<2.	U
J10WR9	06I00791	12 Jan 2006	<0.01	U	<0.07	U	<2.	U
Limit of Detection (LOD)			0.01		0.07		2.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.
J - Parameter between LOD and RDL.

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

DATA CHEM LABORATORIES

QC Summary Page

Report Identification Number: 06I-0115-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 / R300XX J451
Payroll#: 72520

Batch ID: G060C006

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-239967-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-239967-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-239967-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-239967-1	LCS	Beryllium	µg/sample	11.2	NA	10.0	112.	NA
QC-239967-1	LCS	Cadmium	µg/sample	32.7	NA	30.0	109.	NA
QC-239967-1	LCS	Lead	µg/sample	103.	NA	100.	103.	NA
QD-239967-1	LCSD	Beryllium	µg/sample	11.2	11.2	10.0	112.	0.115
QD-239967-1	LCSD	Cadmium	µg/sample	32.6	32.7	30.0	109.	0.161
QD-239967-1	LCSD	Lead	µg/sample	102.	103.	100.	102.	0.0320

MB - Method Blank
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate
LD - Laboratory Duplicate

NA - Not Applicable
ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0
MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS – LCSD|) / ((LCS + LCSD)/2.0)) * 100.
MS, MSD Relative Percent Diff. = ((|MS – MSD|) / ((MS+ MSD)/2.0)) * 100.
LD Relative Percent Diff. = ((|Parent – LD|) / ((Parent + LD)/2.0)) * 100

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

DATA CHEM LABORATORIES

COC Page

Washington Closure Hanford

06I-0115-01

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: CJ Williams	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Kessner	Data Turnaround: 24 hrs
Payroll #: 72520	Sampling Location: 300area/ 333 B106	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R300XX5451	SAF No.: RC-001	
Type of Sample: wipes		ANALYSIS METHOD (SPECIFIC): N105H 7300	Method of Shipment: Fed Ex	
Shipped To: Datachem Salt lake city UT	Wipe Sample Media: Ghost ☒ Yes ☐ No; Other		Bill of Lading/Air Bill No.: 8541 9337 5307	
POSSIBLE SAMPLE HAZARD/REMARKS: Be/Cd/Pb	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.)		
Special Handling and/or Storage: N/a				

SAMPLE ANALYSIS					No	No	No	No	No	No	No	No	
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	
J10RM4	WI	1-10-06	100 cm²			06I0788		X		X	X		
J10RM3	↓	↓	100 cm²	CJW 1-10-06		↓	89	X	CJW 1-10-06	X	X		
J10WT0	↓	↓	Blanks				90	X		X	X		
J10WR9	WI	1-10-06	Blanks			↓	91	X		X	X		
												CJW 1-10-06	
						CJW 1-10-06							

WCH-SH-202 (08/29/2005)

Enter on line below the first Sample Number from Page One:

J10RM4

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Signed:	DATE / TIME	Received By/Signed:	DATE / TIME
Cynthia Williams [signature]	1-10-06 / 1500	3746 B106 Rm 16 locked cabinet	1-10-06 / 1500
3746 bldg Rm #16 locked cabinet Goldie Mathan [signature] Goldie Mathan	01-11-06 1420	RZ Steffler [signature]	1-11-06 1420
RZ Steffler [signature]	WCH 1-11-06 1500	Fed Ex	
Fed EX		[signature]	1/12/06 1015
Metals 3 JW			

LABORATORY SECTION	Received By: [signature]	Title	DATE / TIME 1/12/06 1015

REVIEWED BY: ______________________ DATE: ____________

PRINT/SIGN NAME

WCH-SH-202 (08/29/2005)

Page 2 of 2

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547
Phone: (801) 266-7700
FAX: (801) 268-9992
Web Page: www.datachem.com
E-mail: lab@datachem.com

DATA CHEM LABORATORIES

COC Page

17

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: CJ Williams	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Kessner
Payroll #: 72520	Sampling Location: 300area/ 333 B10b	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R300XX3451	SAF No.: RC-001
Type of Sample: wipes		ANALYSIS METHOD (SPECIFIC): NIOSH 7300	Method of Shipment: Fed Ex
Shipped To: Datachem Salt lake city UT	Wipe Sample Media: Ghost ☒ Yes ☐ No; Other		Bill of Lading/Air Bill No.: 8541 9337 5307
POSSIBLE SAMPLE HAZARD/REMARKS: Be/Cd/Pb	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.)	Data Turnaround: 24 hrs
Special Handling and/or Storage: N/a			

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne
					No	No	No	No	No	No	No	No
J10RM4	WI	1-10-06	100 cm²					X		X	X	
J10RM3			100 cm²					X		X	X	
J10WTD			Blanks					X		X	X	
J10WR9	WI	1-10-06	Blanks					X		X	X	

CJW 1-10-06

CJW 1-10-06

CJW 1-10-06

CJW 1-10-06

COPY

FIELD SAMPLE COPY

Enter on line below the first Sample Number from Page One:

J10R144

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME
Cynthia Williams Cynthia Williams	1-10-06 / 1500	3746 B106 Rm 116 locked cabinet	1-10-06/1500
3746 bldg Rm #116 locked cabinet Goldie Mathan Goldie Mathan	01-11-06 1420	RZ Steffler R.Z. Steffler	1-11-06 1420
RZ Steffler R.Z. Steffler	1-11-06 1500 WCH	Fed Ex	

LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME